627.41 (73)

## SECTION IV.—RIVERS AND FLOODS.

## RIVERS AND FLOODS, FEBRUARY, 1917.

By Alfred J. Henry, Professor in Charge.

[Dated: River and Flood Division, Weather Bureau, Mar. 26, 1917.]

East Gulf and South Atlantic drainage.—In the Gulf and South Atlantic States, while there were a few heavy local rains, yet, in general, the rains were moderate and rarely continued more than 24 hours. The floods were likewise mostly local and of short duration, except in the case of the Santee of South Carolina, the Tombigbee of Alabama, and the Pearl of Mississippi, which streams continued in flood into March. Further details may be had from Tables 1 and 2.

Eastern drainage of Mississippi River.—The only floods of the month in this drainage were local and of little consequence. A light flood swell passed down the lower Ohio on the opening days of the month due to rains in the latter part of the preceding month. Large ice gorges that had formed in the Allegheny at Franklin, Pa., and near Parkers Landing went out on the closing days of the month. Backwater from these gorges caused some damage at both places, viz, \$10,000 at Franklin and \$5,000 at Parkers Landing.

Pacific drainage.—Flood stages were reached in a few instances in the Sacramento and San Joaquin Rivers, as shown in Table 4. The damage was small, and the floods were of short duration.

## Recapitulation of flood damage.

Eastern drainage of Mississippi	15, 000 3, 200
Total	18, 200

Hydrographs for typical points on several principal rivers are shown on Chart I. The stations selected for charting are Keokuk, St. Louis, Memphis, Vicksburg, and New Orleans, on the Mississippi; Cincinnati and Cairo, on the Ohio; Nashville, on the Cumberland; Johnson-ville, on the Tennessee; Kansas City, on the Missouri; Little Rock, on the Arkansas; and Shreveport, on the Red.

Table 1.—Floods in South Atlantic Drainage during February, 1917.

River.	· Station.	Flood stage.			Crest.	
			From—	То	Stage.	Date.
Neuse	Neuse, N. C	Feet. 12.0 27.0 22.0 12.0 12.0 11.0 24.0 14.0 7.0 14.0 11.0	26 21 23 24 24 25 24 26 26 20 27	(*) (*) (*) 24 26 24 24 24 25 21 (*)	Feet. 12.4 25.8 19.4 15.6 13.7 11.0 25.3 14.0 7.8 15.0 12.6	26 25 25 25 24 26 24 24 24 22 25 25 26 27 27 28

<sup>•</sup> Continued into March, 1917.

TABLE 2.—Floods in East Gulf Drainage during February, 1917.

River.	Station.	Flood stuge.	Above flood stage.		Crest.	
			From-	То-	Stage.	Date.
`aliaba. Fombigbee Black Warrior. Hickasawhay. Pearl Do	Lock No. 4, Ala. Canton, Ga. do. Centerville, Ala. Demopolis, Ala. Tuscaloosa, Ala. Enterprise, Miss. Edinburg, Miss. Jackson, Miss.	17.0 11.0 11.0 25.0 39.0 46.0 21.0 21.0	23 21 20 19 24 20 21	28 26 27 20 24 (*) 23	Feet. 37.3 22.8 19.2 15.8 11.8 23.3 52.1 55.2 19.6 20.3 26.2	25 22 21 20 24 21 28 21 17 24 28
Pearl	Edinburg, Miss	21.0 20.0 18.0		18 18 20	18 23	18 (*) 28.2 18 23 19.0

\* Continued into March, 1917.

TABLE 3.—Floods in the eastern Mississippi River Drainage during February, 1917.

(Ohio Basin.)

River.	Station.	Flood stage.	Above flood stage.		Crest.	
			From-	То—	Stage.	Date.
		Feet.			Feet.	
Allegheny	Franklin, Pa	15.0	27	27	† 24.0	27
Do		18.0	23	28	† 22.0	28
Kiskiminetas	Saltsburg, Pa	8.0	24	24	† 8.9	24
Ohio	Henderson, Ky		1	1	34.0	. 1
Do			1	1	36.0	. 1
Do	Mount Vernon, Ind	35.0	1	1	35.7	. 1
Do	Shawneetown, Ill		1 1	2	36.4	. 1
Green	Lock No. 2, Ky	34.0	1 1	2	37.2	. 1
Tennessee	Knoxville, Tenn	12.0	: 21 [	21	12.0	21
Do		32.0	24	26	32.7	24, 25
Clinch	Clinton, Tenn				22.6	25

† Caused mainly by ice gorging to channel.

Table 4.—Floods in Pacific Coast Drainage during February, 1917.

River.	Station.	Flood stage.	Above flood stage.		Crest.	
			From-	То-	Stage.	Date.
Sacramento	Red Bluff, Cal	Feet. 23.0 29.0 17.0 12.0 20.0	25 27 22 21	26 27 23 22	Feet. 27.0 26.4 17.1 12.8 21.0	25 26 27 22 22

## MEAN LAKE LEVELS DURING FEBRUARY, 1917.

By United States Lake Survey.
[Dated: Detroit, Mich., Mar. 5, 1917.]

The following data are reported in the "Notice to Mariners" of the above date:

	Lakes.			
Data.	Supe- rior.	Michi- gan and Huron.	Erie.	On- tario.
Mean level during February, 1917: Above mean sea level at New York. Above or below— Mean stage of January, 1917 Mean stage of February, 1916 Average stage for February, last 10 years Highest recorded February stage	Feet. 602.42 -0.36 +0.01 +0.68 -0.06 +1.66	Feet. 580. 49 +0.01 +1.09 +0.62 -2.23 +1.33	Feet. 571.35 -0.33 -0.64 -0.34 -2.40 +0.72	Feet. 245.08 -0.18 -0.33 -0.57 -2.59 +1.25
Average relation of the February level to— January level	-0.2 +0.2	0.0 0.0	-0.1 -0.1	+0.2 -0.2